

A Comparative Study of Sports Teaching Clubs in Colleges and Universities in China Based on Motion Capture Technology

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Keywords: Motion Capture, Ordinary Colleges and Universities, Physical Education, Club

Abstract: on the Basis of Summarizing the Previous Research and Practice, This Paper Analyzes the Foundation and Content of the Construction of the Sports Teaching Club Model, and Continuously Reforms and Innovates the Sports Teaching Club Model. Based on the Technology of Sports Capture, This Paper Analyzes the Current Situation of the Development of Sports Teaching Clubs in Colleges and Universities in China and the Effect of the Sports Teaching Clubs in Anshan Teachers College. Some Constructive Suggestions Are Put Forward to Provide Reference for the Construction of College Physical Education Clubs Suitable for Chinese National Conditions.

1. Introduction

In Recent Years, Sports Theorists and Teachers in Colleges and Universities in Our Country Have Made Researches on the Sports Teaching Mode in Colleges and Universities. the Results Show That the Club-Type Sports Teaching Mode is One of the More Typical Sports Teaching Modes in Colleges and Universities in Our Country. Some Colleges and Universities Have Implemented the Sports Club Teaching Mode in Combination with the Actual Situation in Our School and Have Achieved Good Results [1]. College Physical Education Needs to Re-Establish a Brand-New Theoretical and Practical System. the Reform of Physical Education Curriculum Should Start from the Perspective of National Fitness and Quality Education, Take Lifelong Physical Education as the Guiding Ideology, and Take Health First as the Fundamental Direction to Construct the Framework System of College Physical Education [2]. through the Motion Capture Technology, the Motion Parameters, Physiological and Biochemical Indexes and Other Data of a Certain Kind of Technical Movements Are Obtained, So That the Motion Laws Are Counted, and Standard and Standard Technical Guidance is Provided for Physical Education and Sports Training [3]. It is a Hot Issue in the Reform of Physical Education in Colleges and Universities to Cultivate Their Sports Autonomy So as to Prevent Them from Graduating with the Graduation of Students. from the Current Point of View, the Role of Traditional Physical Education in Enhancing Students' Physical Fitness is Not in Place [4]. This Paper Studies the Experiment of Club Teaching in Physical Education in Colleges and Universities, Tests and Compares Its Effect, Understands the Feasibility of Physical Education in Colleges and Universities, and Aims to Find a Physical Education Teaching Mode Suitable for the All-Round Physical and Mental Development of College Students in China. in This New Situation, the Traditional College Physical Education Curriculum System Based on Active Teaching Needs to Carry out Corresponding Reform, Not Only in the Micro Reform of Physical Education Teaching Mode, But Also in the Macro Reform of the Overall Curriculum System. in Order to Adapt to College Sports into the New Century to Train Talents to Do a Good Job of Preparation.

2. Research Method

2.1 Literature Research Method

On the basis of more than 20 published papers, materials and outlines of sports clubs in colleges and universities, we have basically mastered the latest trends in the research of teaching modes at

home and abroad.

2.2 Comparative Law

Through the investigation and understanding of the current situation of sports teaching clubs in nearly five universities, we visited more than 20 experts and scholars to observe and learn the teaching effect.

2.3 Experimentation

Taking the students of normal colleges as the object, the teaching experiment research is carried out to continuously improve and perfect the practice of the sports teaching club in order to prove the feasibility of the sports teaching club.

3. Result Analysis

3.1 An Analysis of the Current Situation of College Sports Teaching Clubs

The implementation of club-type physical education in colleges and universities is a study of a new type of physical education teaching mode. Its meaning is to cultivate and establish students' lifelong physical education consciousness according to the goal of talents cultivation in colleges and universities and the needs of college students for physical education teaching. Physical exercise is continuous and consistent with the school philosophy. In the national physical health test, it was found that more than 80% of the students participating in the sports teaching club have maintained or increased their physical fitness [5]. Physical education is mostly conducted outdoors, with certain requirements for venues and equipment. However, in the teaching mode of sports clubs, students have greater freedom to choose sports events, which to a certain extent determines the universality of the construction of venues related to sports events. Motion capture system can be classified from different angles. According to the different parts of capture, it can be divided into body capture, gesture capture and face capture. The club sports teaching mode implemented by the school of economics. Before the beginning of each semester, the ministry of physical education organizes all the teachers to introduce their basic information and the courses to be offered, and publishes each teacher's resume to the students, and establishes a computer course selection retrieval system. Lectures are given every afternoon, which does not take up the time of other subjects. In the form of mixed class and licensed class, teachers can choose clubs freely, students can choose teachers according to their first wishes, and set their own teaching objectives, without requiring a unified teaching plan. The main reason is that there are no more physical education courses and less physical exercises. The sports club has realized the goal and function of university sports teaching, and it is also consistent with the idea of running a school.

The theory of physical education curriculum was based on the “pyramid” structure theory of the former Soviet Union's competitive sports theory. The curriculum goal was to strengthen the physique and master the sports technology. The state managed the curriculum materials at the first level, and implemented a unified teaching plan, syllabus and textbook throughout the country [6]. Before the beginning of the class, the PE teaching and Research Office will organize the students to choose courses. Students can choose courses at any time of the week or at any teacher of the same course (Club) in any unit of the week. In class, students are the main part of class attendance and organization of students. Teachers only guide and inspire students' thinking. The assessment method is mainly based on the characteristics of various sports to develop standards and content, and to link the students' performance with the competition. To make the goal of college physical education more suitable for the development of students' personality and to combine it with the long-term goal of training qualified talents with lifelong health. The assessment method is that when students have completed the required class hours in a certain club within one semester, the club will grant the examination. However, after-school physical exercises are completely managed and supervised by students themselves. For example, when teachers assign homework after class, students' sports committees and team leaders can check it out. Let students master one or two kinds

of lifelong beneficial sports as the main task, and pursue the goals of sports ability, habit, interest, consciousness, etc.

3.2 Successful Experience of Sports Teaching Club

A wide range of knowledge, various activities and sports forms in the physical education syllabus can provide more and more flexible choice opportunities in combination with students' personality development. This kind of teaching can show their personality in “independent or autonomous” behavior. We should pay attention to the choice of students' main body and develop their personality to meet the needs. It can be seen that this kind of physical education teaching mode is not only the change of teaching organization, but also the attraction of physical education. The key to the implementation is to reform the teaching contents, methods and the structure of teaching materials. There are dozens of sports to offer students more choices. In order to attract and satisfy students, some emerging sports events have also entered the university sports classes. According to the needs of students, make full use of school resources, through teaching practice, choose the projects that students like, have practical value and are easy to carry out. In sports teaching activities, people's social mutual behavior is the behavior that the rational subjects combine with each other. Really realize the unique sports fun generated by the internal connection of various sports, so that students can form habits in learning and exercising [7]. This encourages students to study seriously, actively and intensively, and exercise can last and deepen in order to obtain ideal results.

Judging from the development trend of world education in recent years, the problem of youth personality development has become a problem that has been widely paid attention to. They believe that the “high score rate” and “qualified rate” in traditional education sacrifice students' individual interests, emotions, hobbies and talents, while the individual requirements are the source of people's enthusiasm. It reflects a subject's awareness of sports value, which not only pursues the long-term benefits of exercise, but also pays more attention to the functions of physical exercise such as fitness, entertainment, recreation and social interaction. Because of this, college physical education not only emphasizes meeting the special needs of college students in the process of physical and mental development, but also requires meeting the needs of college students' lifelong physical development [8]. Sports capture technology can capture the movement of athletes, carry out quantitative analysis, research and improve methods, also can capture the movement of athletes, and make comparative analysis with the movements of excellent athletes, so as to help athletes train.

Teaching is based on students' hobbies and interests. School physical education no longer takes enhancing physical fitness as the main goal. In teaching, students' hobbies are cultivated to make them have strong interest in sports and master sports technology. At the same time, the club style physical education teaching mode is still deficient in cultivating students' will quality. Although it satisfies students' interests, it increases the freedom of learning. Through physical education, students' interest in physical education is cultivated, so that students can master the basic skills and methods of physical exercise, firmly establish lifelong physical education thoughts, improve college students' physical literacy, and improve their health, thus improving their physiological, psychological and social levels. Club-type physical education has established multi-level, multi-dimensional and diversified physical education teaching objectives, which can enable students to fully realize their own values and give full play to their potential.

The emphasis is on teachers as the leading factor, aiming at transferring “sports technology and skills center” to “sports methods and means, experience” and overcoming the tendency of taking competition as the center. Emphasis is placed on active learning by students and on cognition and emotional experience. Reforming and improving the teaching of sports clubs can better develop students' physical quality, improve students' physical and mental health, and improve students' physical quality and comprehensive ability. It can stimulate students' enthusiasm and enthusiasm to participate in physical exercises. It is conducive to giving full play to students' subjective initiative and creativity. Sports system simulation teaching and training based on motion capture technology has become a useful supplement to traditional sports teaching and training methods due to its high

fidelity, open sharing, human-computer interaction, reusability and good safety. Give full play to the main role of students and the leading role of teachers, strive to advocate open and inquiry teaching, and strive to expand the time and space of physical education curriculum. The group members are composed of students of different grades and different sports levels, which completely breaks the boundaries of grades. At the same time, they are divided into junior, middle and senior clubs according to their physical quality and sports ability. Pay attention to the cultivation of students' interest habits, give full play to students' subjective initiative, inspire and guide students to learn and exercise with their own wisdom and ability, and boldly let students participate in teaching activities. Independently choose sports events, class time and teachers, disrupt the original administrative class, regroup according to the items, discharge into the schedule, and have classes at a fixed time.

4. Suggestions on Implementing Club Mode in Physical Education Teaching in Colleges and Universities in China

4.1 Optimize the Course Selection Mechanism of Club Teaching Mode

The school should inform the students about the teaching arrangement of the sports club, the content and time of the project through teachers, radio, brochures, new media and other channels, and explain the advanced nature and advantages of the teaching mode of the sports club. In the process of learning, students can truly experience the special sports fun generated by the internal connection of various sports events, so that students can form habits in learning and exercising. According to their own special listing, teachers will arrange their own teaching contents and encourage teachers to continuously attract new technologies and knowledge to meet students' interest and needs in sports knowledge and skills. The school shall establish a fair, just and open platform for curriculum selection, including curriculum content, curriculum time, curriculum teachers, the number of people currently reported in the curriculum, the number of people limited, curriculum related requirements, precautions, etc., so as to facilitate students' scientific curriculum selection. The teaching reform of university sports club is a complex and systematic project, which needs the cooperation and coordination of many parties to give full play to the best benefit. It is suggested that when carrying out the teaching reform of sports clubs, it must be actively supported by the school leaders at all levels and relevant departments.

4.2 Strengthen the Integration of Physical Education in and out of Class

The teaching mode of sports club is to realize the combination of inside and outside the class. In addition to the theory and skill teaching in the classroom, it should also provide opportunities for students outside the class, such as sports knowledge lectures, competitive training competitions, etc. , to stimulate their interest and enthusiasm for sports learning and competition. The choice of adapting to the two aspects of society is obviously higher than that of the students in the traditional (skill) teaching mode, which fully embodies the people-oriented education thought of modern education. Such students will be better able to adapt to the society after graduation. The implementation of sports club teaching reform in colleges and universities has put forward higher requirements for teachers' ability. Motion reproduction is an important requirement for sports system simulation, and motion capture can accomplish this task well. It is suggested that teachers' moral education should be strengthened while training should be strengthened. Special theoretical lectures are arranged by grade groups in a unified way, so that students can fully understand and master the general laws of physical exercise, flexibly select exercise methods according to their own needs and characteristics, and test students' thoughts, theories and methods in and out of class through integration. From the perspective of combining theory with practice, let theoretical knowledge externalize into the basis of students' sports behavior, let club teaching activities internalize into the motive force of students' sports learning, and strengthen the integrated sports education inside and outside class is to let students reasonably choose suitable sports learning on the premise of freedom and voluntariness, and the school will train sports talents in a targeted way.

4.3 Constructing a Scientific and Reasonable Teaching Evaluation System

Absolute evaluation is combined with relative evaluation, process evaluation is combined with final evaluation, and “multi factor comprehensive evaluation method” is adopted to integrate students' learning attitude, attendance, theoretical knowledge examination, technical evaluation, standard and students' progress into the evaluation system. Colleges and universities should be in line with the assessment methods of physical education teaching in senior high school, and implement the methods of comprehensive examination and comprehensive evaluation, that is, to implement the mutual evaluation of self-evaluation and individual progress according to the specific situation of students. To organize high-level students to take part in the examination of the qualification certificate of social amateur coaches, so as to stimulate students' learning enthusiasm with higher objectives; According to the actual situation of colleges and universities, and referring to the social amateur coach qualification certificate examination, the college-level amateur coach qualification certificate examination can also be set up. In the aspect of assessment and evaluation, absolute evaluation should be reduced to arouse the enthusiasm of underachievers in physical exercise.

5. Conclusions

The teaching mode of sports clubs is an organizational form that conforms to the current college sports training objectives. It plays a positive role in promoting students' autonomous learning, self-exercise, independent thinking and creative ability, and conforms to the guiding ideology of health first. The establishment of school sports teaching clubs can break through the limitation of sports class hours, extend the students' sports teaching process to extracurricular activities, keep the unity and continuity of sports teaching and extracurricular activities, and ensure the time for students to participate in sports exercises. With the development of motion capture technology, it is believed that more advanced capture devices will appear in the future, and motion capture devices will be more suitable for various application research, which will be the future development trend. At the same time of further research on the theory of sports clubs, we should strengthen the construction of teachers, expand the sports venues, and establish a perfect teaching system of sports clubs. Summarize the experience and existing problems of the reform of the sports teaching club, share and exchange, find good solutions; the course selection system is complex, do communication and cooperation among many departments, timely quality control; improve the software and hardware environment of the sports teaching, and create conditions for the sports teaching club.

Acknowledgement

This work was support by the 2018 annual guangdong education science ‘13th five-year plan’ project: Research on the reform of physical education curriculum system in colleges and universities based on healthy physical fitness (No. 2018GXJK249).

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